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CALLAWAY PLANT  
ADMINISTRATIVE PROCEDURE

APA-ZZ-00743

FIRE TEAM ORGANIZATION AND DUTIES

RESPONSIBLE DEPARTMENT PROTECTIVE SERVICES

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This procedure contains the following:

Pages	<u>1</u>	through	<u>14</u>
Attachments	_____	through	_____
Tables	_____	through	_____
Figures	_____	through	_____
Appendices	_____	through	_____
Checkoff Lists	_____	through	_____

This procedure has \_\_\_\_\_ checkoff list(s) maintained in the mainframe computer.

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DEFICIENCY LIST

Section	Deficiency Description	Constraints
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## FIRE TEAM ORGANIZATION AND DUTIES

### 1 PURPOSE AND SCOPE

#### 1.1 PURPOSE

The purpose of this procedure is to outline the organizational requirements of the Callaway Plant Fire Team.

#### 1.2 SCOPE

This procedure encompasses the organization, responsibilities, and legal requirements of the Callaway Plant Fire Team.

### 2 PLANT FIRE FIGHTING PHILOSOPHY

#### 2.1 FIRE TEAM MISSION STATEMENT

The mission of the Callaway Plant Fire Brigade is to provide a superior level of protection to control or manage a fire or other emergency incidents occurring on site. This mission requires the team effort of the Fire Brigade and support personnel united into the Callaway Plant Fire Team. The Callaway Plant Fire Brigade is responsible for fire suppression activities, Chemical Emergency Response, support of MERT and Confined Space entry responses and other emergency support as assigned by the Callaway Plant management team.

#### 2.2 FIRE FIGHTING CONCEPT OF OPERATIONS

2.2.1 During any emergency involving the Fire Brigade, strategic and tactical decisions regarding suppression operations are the responsibility of the Fire Brigade Leader in his role as Incident Commander. Actions taken by the Fire Brigade Leader should be appropriate for the varying degrees of severity encountered and the levels of constraint on the Fire Brigade at the time of the incident.

2.2.2 The goal of the Fire Brigade is to protect life and property from loss by fire or other hazards using management skills that execute a preconceived strategy and formulate and employ tactics based on sound experience and facts gathered as the incident progresses.

### 3 FIRE TEAM ORGANIZATION

- 3.1 The Callaway Plant Fire Team consists of a Fire Brigade on each operating shift and support personnel from Health Physics, Operations, Engineering, Chemistry, and the Security Force. Fire Team personnel are under the control of and responsible to the Incident Commander (Fire Brigade Leader) during fire response, chemical emergencies, and other emergency events.

<p><u>NOTE:</u> Fire Brigade Leader and Incident Commander are synonymous terms and will be used interchangeably throughout this procedure.</p>
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- 3.2 FIRE BRIGADE (COMN 473, 475, 591, 828, 828, 3413, 4015, FSAR SA 9.5E, FSAR 16.12.1.B, RERP 5.1.11.1, 10CFR50.34, 10CFR50.E, FSAR SA 9.5.1.8)
- 3.2.1 A Fire Brigade consisting of at least five members SHALL be available and equipped at all times to control and handle emergencies. There may be less than five members for a period of time not to exceed 2 hours in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.
- 3.2.2 The Fire Brigade normally consists of the following personnel from the on-duty shift: Operating Supervisor (Fire Brigade Leader/Incident Commander), and four Equipment Operators (one serves as Assistant Fire Brigade Leader).
- 3.2.3 The minimum shift staffing includes two reactor operators and one equipment operator which cannot be members of the Fire Brigade, as specified in (FSAR 16.12.1.B)
- 3.2.4 The Fire Brigade SHALL be established to ensure manual fire fighting capability for all areas of the plant containing structures, systems or components important to safety.

- 3.2.5 The minimum equipment provided for the Fire Brigade consists of turnout (bunker) coat and pants, boots, gloves, helmet, emergency communications equipment, portable lights, portable ventilation equipment, battery-powered portable hand lights and portable extinguishers.
- 3.2.5.1 Periodic inventory and operability checks of team equipment are performed in accordance with condition tag 819223.
- 3.2.5.2 Personal gear inspection is performed periodically in accordance with **FPP-ZZ-00009**, Appendix 2.
- 3.2.6 The Fire Brigade assembles at the Fire Brigade lockers, Room 3706, Communications Corridor, 2061' elevation, unless directed otherwise by the Shift Supervisor or Fire Brigade Leader.  
(FSAR SA 9.5.1.12 )
- 3.3 SUPPORT PERSONNEL
- 3.3.1 When the Fire Brigade is dispatched to control an emergency event, the remaining fire team members, consisting of support personnel, respond as follows:
- 3.3.2 The Health Physics Department should provide a Health Physics Technician for fires with potential radiological contamination and provide breathing air support, as needed.
- 3.3.3 The Security Department should provide a MERT Leader and MERT members.
- 3.3.4 Available Security Force personnel MUST provide assistance in:
- moving additional fire fighting equipment to the fire scene
  - establishing and controlling a staging area for off-site emergency vehicles
  - establishing access to fire areas, providing access for off-site emergency organizations as required
  - advising the Incident Commander of the reportability of fires
  - other duties as assigned by the Incident Commander.

**NOTE:**

The availability of Security Force Personnel is determined by the Shift Security Supervisor.

- 3.3.5 The Chemistry Department is to provide technical support personnel during a Confined Space Emergency.
- 3.3.6 The Chemistry Department is to provide technical support personnel during a Chemical Emergency.
- 3.3.7 The Safety Department should provide a nurse and safety representative (as available).
- 3.3.8 The Engineering Department should provide a Fire Protection Engineer (as available).
- 3.3.9 Additional support personnel to assist with emergency mitigation activities may be requested by the Incident Commander.

## 4 RESPONSIBILITIES

### 4.1 MANAGER, NUCLEAR ENGINEERING

- 4.1.1 Managing the Callaway Plant Fire Brigade. This responsibility is delegated to the Fire Marshall. (**FSAR 9.5.1**)

### 4.2 FIRE MARSHALL

The Fire Marshall is responsible for:

- 4.2.1 Establishing and maintaining a trained Fire Brigade and Fire Team organization.
- 4.2.2 Ensuring personnel assigned to the Fire Brigade are current in Fire Brigade qualifications.
- 4.2.3 Surveillance of Fire Brigade equipment, including replacement as necessary, to ensure adequate quantities are available in the proper locations.
- 4.2.4 Performing periodic review of the Fire Brigade roster and initiating changes as needed.
- 4.2.5 Conducting post-event investigations.

### 4.3 SUPERINTENDENT, OPERATIONS

The Superintendent, Operations is responsible for:

- 4.3.1 Administration of Fire Brigade operations and conduct.



#### 4.4 SAFETY SUPERVISOR

The Safety Supervisor is responsible for:

- 4.4.1 Assisting with the conduct and review of the Fire Brigade Training Program, including Fire Brigade drills, as necessary.
- 4.4.2 Providing Medical support, as available, to the Incident Commander during an emergency event.
- 4.4.3 Providing Safety support in the Incident Command System Organization when requested by the Incident Commander during an emergency event.

#### 4.5 FIRE BRIGADE LEADER (COMN 485, 3413, 43090) (FSAR SA 9.5.1.8, FSAR SA 9.5.1.7.5, RERP 5.1.11.1, 10 CFR 50.34, 10 CFR 50.E)

The On-Shift Operating Supervisor SHALL serve as Fire Brigade Leader. His responsibilities include the following:

- 4.5.1 Ensuring that the Shift Supervisor/Fire Brigade Leader Flowchart for Fire Response, Attachment 1, **EIP-ZZ-00226**, is initiated and followed in response to a fire.
- 4.5.2 Ensuring that the Fire Brigade Leader Checklist for HazMat Response, Attachment 3, **EIP-ZZ-03010**, is initiated and followed in response to a chemical emergency.
- 4.5.3 At the beginning of the work shift, ensuring at least four other qualified Fire Brigade members are assigned to the shift Fire Brigade and are present and advised of their Brigade duties and status of the Fire Protection system.
- 4.5.4 Documenting the assignment of an Assistant Fire Brigade Leader and three members with the Assistant Fire Brigade Leader being so designated.
- 4.5.5 Assuming the role of INCIDENT COMMANDER in the Incident Command System Organization during a fire emergency and establishing a Command Post.
- 4.5.6 Commanding the plant Fire Brigade, support personnel, and off-site emergency personnel who have responded to a call for assistance from the Control Room.

- 4.5.7 Making strategic and tactical decisions regarding suppression operations.
- 4.5.8 Acting appropriately for the varying degrees of severity encountered and the levels of constraint on the Brigade at the time of the incident.
- 4.5.9 Directing fire fighting operations to minimize damage to plant facilities.
- 4.5.10 Ensuring the safety of Fire Team personnel.
- 4.5.11 Ensuring the safety of plant personnel.
- 4.5.12 Safeguarding the general public.
- 4.5.13 Determining the level and need of assistance required from plant personnel and offsite support to respond to the fire.
- 4.5.14 Delegating and assigning responsibility and authority for specific Incident Command positions to plant personnel in accordance with the severity of the emergency and the duties which need to be accomplished.
- 4.5.15 Establishing communications between emergency response personnel and the Control Room and advising the Shift Supervisor of the impact of the fire on reactor shutdown and cooldown capability, if the possibility of such damage is a valid concern.
- 4.5.16 Ensuring the restoration of fire protection systems and equipment following any fire emergencies or drills. This responsibility may be delegated.
- 4.5.17 Advising the Shift Supervisor as to whether to implement the Callaway Plant Radiological Emergency Response Plan.
- 4.5.18 Notifying the on-duty Shift Supervisor as early as possible concerning the nature of the fire's origin (i.e., suspicious, unknown, or known). The incident may be reportable.
- 4.5.19 Assisting with post-fire investigations, as needed, and completing the necessary CAR.
- 4.5.20 Performing a Hazard Assessment and directing the on-scene response during a Chemical Emergency.
- 4.5.21 Directing the on-scene response during a rescue event.
- 4.5.22 Establishing an Incident Command System during a MERT event.

4.6 **CONTROL ROOM PERSONNEL (COMN 505) (FSAR 9.5.1.9, FSAR SA 9.5E, FSAR 9.5.1.12)**

The Unit Reactor Operators (UROs) are responsible for:

- 4.6.1 Sounding the plant fire or emergency alarm.
- 4.6.2 Announcing the emergency location and initiating response.
- 4.6.3 Implementing reports of fire received by the Control Room.
- 4.6.4 Providing information to the Shift Supervisor concerning the type, size and location of the fire.
- 4.6.5 Obtaining and following the guidance of the appropriate pre-fire strategy.
- 4.6.6 Adjusting plant lineups, as directed, to support emergency efforts.
- 4.6.7 Maintaining communications between the Control Room and the emergency scene.

4.7 **SHIFT SUPERVISOR (COMN 485) (FSAR SA 9.5.1.8, FSAR APPENDIX 9.5E, RERP 5.2.2.2)**

The Shift Supervisor is responsible for:

- 4.7.1 Ensuring the Shift Supervisor/Fire Brigade Leader Flowchart for Fire Response, Attachment 1, **EIP-ZZ-00226**, is initiated and followed in response to a fire.
- 4.7.2 Ensuring the Shift Supervisor Checklist for HazMat/Oil Response, Attachment 1, **EIP-ZZ-03010**, is initiated and followed in response to a chemical emergency.
- 4.7.3 Ensuring the Shift Supervisor Checklist for Injuries at Callaway is initiated and followed in response to a medical emergency.
- 4.7.4 Ensuring the appropriate alarms are sounded and appropriate announcements are made.
- 4.7.5 Ensuring the Control Room shift crew obtains the appropriate pre-fire strategy and follows the applicable guidelines.

- 4.7.6 Directing a safe shutdown of the plant, if required.
- 4.7.7 Classifying emergencies as appropriate.
- 4.7.8 Notifying the Emergency Duty Officer of plant conditions.
- 4.7.9 Initiating the callout of off duty Fire Brigade personnel for assistance, if necessary.
- 4.7.10 Requesting and coordinating off site fire department assistance with the Callaway County Emergency Operations Center (EOC).
- 4.7.11 Determining the reportability of an event after receiving information regarding the event's origin.
- 4.7.12 Providing assistance to the Fire Brigade as requested by the Fire Brigade Leader.
- 4.7.13 Contacting Systems Engineering for an evaluation of HVAC surveillance requirements following a fire or other emergency.
- 4.7.14 Notifying the Fire Marshall and the Fire Protection Engineer(s) of fires that occur during off-normal working hours.
- 4.7.15 Determining the degree of response necessary.
- 4.7.16 Ensuring appropriate reports are initiated.
- 4.7.17 Ensuring Technical Specifications are met.
- 4.8 SHIFT SECURITY SUPERVISOR

The Shift Security Supervisor is responsible for:

- 4.8.1 Providing a security representative at the Command Post.
- 4.8.2 Providing assistance in moving emergency equipment to the emergency scene.
- 4.8.3 Providing assistance in transporting Fire Brigade and support personnel to the emergency scene.
- 4.8.4 Establishing and controlling access to the emergency area.

- 4.8.5 Establishing off-site support staging areas, when needed.
- 4.8.6 Directing off-site emergency response personnel and equipment to appropriate staging areas.
- 4.8.7 Expediting access of off-site personnel and equipment, as requested by the Incident Commander.
- 4.8.8 Assisting in the establishment of a communications link between the Incident Commander and off-site personnel after off-site personnel arrive at the site.
- 4.8.9 Providing transportation of off-site personnel to the emergency scene, as necessary.
- 4.8.10 Advising the Shift Supervisor and/or Fire Brigade Leader on reportability requirements, if the event is suspicious or of unknown origin.
- 4.8.11 Providing assistance to the Fire Brigade in gaining access to the emergency location.
- 4.8.12 Provide MERT during emergency events.
- 4.9 SUPERINTENDENT, HEALTH PHYSICS  
  
The Superintendent, Health Physics is responsible for:
  - 4.9.1 Providing technical support to perform radiation monitoring and advise the Fire Brigade Leader during any fire, which has actual or potential radiological consequences.
  - 4.9.2 Maintaining and providing an adequate supply of self-contained breathing apparatus (SCBA) air bottles for use during fire emergencies.  
**(COMN 4015)**
  - 4.9.3 Identifying, procuring and maintaining respiratory protection equipment for the Fire Brigade.

#### 4.10 FIRE PROTECTION ENGINEER(S)

The Fire Protection Engineer(s) is responsible for:

- 4.10.1 Providing technical support in the Incident Command System Organization when requested by the Incident Commander during a fire and/or chemical emergency.
- 4.10.2 Surveillance of fire equipment, other than Fire Brigade equipment, including replacement, as necessary, to ensure adequate quantities are available in the proper locations.
- 4.10.3 Conducting post-event investigations when requested by the Shift Supervisor.
- 4.10.4 Conducting post-event fire protection and equipment surveillances.

#### 4.11 PLANT PERSONNEL (COMN 505) (FSAR 9.5.1.9, FSAR APPENDIX 9.5E, FSAR 9.5.1.12)

Plant personnel are responsible for:

- 4.11.1 Knowing the locations of fire alarm pull stations, public address system stations and emergency equipment in areas they normally occupy, and to have a working knowledge of the parts of this procedure that pertain to them.
- 4.11.2 Reporting a fire.
- 4.11.3 Complying with the instructions of Control Room personnel.
- 4.11.4 Complying with the instructions of the Fire Brigade Leader and/or Security Officers at the scene of a fire.
- 4.11.5 Providing support, as requested, by the Control Room.

#### 4.12 ASSISTANT FIRE BRIGADE LEADER

The Assistant Fire Brigade Leader is responsible for:

- 4.12.1 Implementing the technical directions of the Fire Brigade Leader.
- 4.12.2 Those responsibilities of the Fire Brigade Leader listed in this procedure should the Fire Brigade Leader become incapacitated or fail to arrive.

4.13 REMAINING FIRE BRIGADE MEMBERS (COMN 505)  
(FSAR 9.5.1.9, FSAR APPENDIX 9.5E, FSAR 9.5.1.12)

Upon hearing the fire or emergency alarm and announcement of the emergency location, the remaining Fire Brigade members are responsible for the following:

- 4.13.1 Performing duties as listed in the Shift Supervisor/Fire Brigade Leaders Flowchart for Fire Response, Attachment 1, **EIP-ZZ-00226.**
- 4.13.2 Performing duties as listed in the Fire Brigade Leader Checklist for HazMat Response, Attachment 1, **EIP-ZZ-00226.**
- 4.13.3 Responding to any other emergency as directed by Control Room and performing duties as requested by the Incident Commander.

4.14 SUPERINTENDENT, PROTECTIVE SERVICES

The Superintendent, Protective Services is responsible for:

- 4.14.1 Obtaining a review and approval of RERP drills involving Fire Team personnel from the Fire Marshal.

4.15 SUPERINTENDENT, CHEMISTRY AND RADWASTE

The Superintendent, Chemistry and Radwaste is responsible for:

- 4.15.1 Providing technical support during a Chemical Emergency.
- 4.15.2 Providing technical support during a Confined Space Rescue.

## 5 QUALIFICATIONS

- 5.1 In order to be qualified as a member of the Fire Brigade, an individual SHALL have completed the initial training required for a position on the Fire Brigade, and be available to answer alarms. **(COMN 488) (FSAR SA 9.5.1.8, FSAR APPENDIX 9.5E)**

5.2 FIRE BRIGADE TRAINING **(COMN 828)**  
**(FSAR SA APPENDIX 9.5E)**

The Fire Brigade training program, as specified in **FPP-ZZ-00009**, ensures the capability to mitigate emergency events is established and maintained. The program consists of classroom instruction supplemented with regular planned meetings, Fire Brigade practice, and emergency response drills.

5.3 PHYSICALS **(COMN 488) (FSAR SA 9.5.1.8,**  
**FSAR SA APPENDIX 9.5E)**

- 5.3.1 The qualifications of each Fire Brigade member SHALL include an annual physical examination to determine his/her ability to perform strenuous emergency response activities.

## 6 CHAIN OF COMMAND

- 6.1 The Fire Brigade Leader reports to the Shift Supervisor and becomes the on-scene Incident Commander in charge of the Fire Brigade and all support personnel responding to assist.
- 6.2 The Fire Brigade Leader can only be transferred to another reporting relationship with the Shift Supervisor's specific direction, which includes a positive, direct transfer with reporting relationships clearly defined.
- 6.3 The Fire Brigade members and Fire Team support personnel receive instructions from and report to the Fire Brigade Leader or his designee.
- 6.4 Off-site response personnel working within the Incident Command structure established by the Fire Brigade Leader will report to their superior officer who is under the direction of the Fire Brigade Leader.



## 7 INCIDENT COMMAND SYSTEM

- 7.1 An on-scene Incident Command System will be established at each emergency event involving the Fire Brigade Leader and/or Fire Brigade. It should be established to ensure coordinated and positive control of the emergency.
- 7.2 The goals of the on-scene Incident Command System are as follows:
  - 7.2.1 Ensure central control of the incident scene.
  - 7.2.2 Provide for inter-departmental/agency command level coordination.
  - 7.2.3 Provide that no individual will become overloaded with more detail than can be handled.
  - 7.2.4 Provide the ability to delegate responsibility and authority for specific Incident Command positions to plant personnel in accordance with the severity of the emergency and the duties, which need to be accomplished.
- 7.3 The size and complexity of the Incident Command System established by the Fire Brigade Leader is determined by event magnitude.

## 8 REFERENCES (COMN 558) (FSAR APPENDIX 9.5A)

- 8.1 **FSAR SP APPENDIX 9.5E**
- 8.2 **FSAR SA 9.5.1**
- 8.3 **FSAR SA APPENDIX 9.5-A**
- 8.4 Radiological Emergency Response Plan (**RERP**)
- 8.5 **FSAR 16.12.1.B**

- 8.6 **EIP-ZZ-00226**, Fire Response Procedure for Callaway Plant.
- 8.7 **EIP-ZZ-03010**, Hazardous Chemical/Oil Spill Response/Spill Cleanup Implementing Procedure.
- 8.8 **FPP-ZZ-00000**, Series of Procedures, Pre-Fire Strategy.
- 8.9 **FPP-ZZ-00009**, Fire Protection Training Program.
- 8.10 Reg. Guide 1.101
- 8.11 Standard NFPA 27
- 8.12 Standard NFPA 194
- 8.13 Standard NFPA 196
- 8.14 Standard NFPA 197
- 8.15 29 CFR 1910.156

## 9 RECORDS

### 9.1 QA RECORDS

- 9.1.1 Fire Drill Planning and Authorization, CA0813 (filed in accordance with **FPP-ZZ-00009**).
- 9.1.2 Fire Drill Critique, CA0814 (filed in accordance with **FPP-ZZ-00009**).

### 9.2 COMMERCIAL RECORDS

- 9.2.1 None